

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Approval to Award an Honorary Doctorate of Science Degree
to Jean Marie Dubois, Iowa State University

Date: November 6, 2000

Recommended Action:

Approve the award of an Honorary Doctorate of Science degree to Jean Marie Dubois.

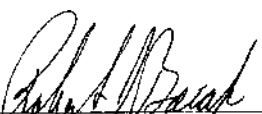
Executive Summary:

Iowa State University requests approval to award an honorary doctorate of science degree to Jean Marie Dubois. Professor Dubois is one of the leading researchers in the area of quasicrystals. Quasicrystals are materials whose atomic arrangements defy understanding according to conventional rules of crystallography because the atoms are well-ordered but not periodic. Quasicrystals were first reported in the literature in 1984. Since then, Professor Dubois has led the field through his achievements in science and engineering, which are marked by many comparable "firsts." He was responsible for the first atomic structure determination, and the first study of phase transformations; he led the first study showing that conduction states are nearly absent in icosahedral phases. He was responsible for the first patent of quasicrystals as thermal barrier coatings. The theme throughout his career has been an amazing blend of science and engineering, wherein a knowledge of one is used to make advances in the other. Professor Dubois also has a rare ability to be able to speak across the fields from mathematics to engineering of those scientists who are working on quasicrystals. Professor Dubois brings together researchers across the world, including a large and key team at Iowa State University and at the Ames Laboratory.

Iowa State University recognizes that cutting edge research is now taking place at the edges of the disciplines and across disciplines. Professor Dubois is an example of one who moves across disciplines and who brings new insights and deeper understandings and draws upon many fields and brings many researchers together. As many researchers have noted, Professor Dubois was the first to help demonstrate that there are many important benefits for humankind from this research.

Professor Dubois has a doctoral degree in Physics from the Institut National Polytechnique de Lorraine in Nancy, France. He is the Director of Research at the Centre National de la Recherche Scientifique in Paris. Among his many international recognitions are the Prix Rist from the French Metallurgical Society [1983], the IBM Materials Science Award [1987], the Xinghai Friendship Award for Foreign Expert, China [1999], and the Yves Rocard Prize from the French Physical Society [1999]. Professor Dubois has authored or co-authored more than 230 refereed publications, has given more than 85 presentations at international conferences, and has consulting arrangements with universities on virtually every continent.

The Departments of Chemistry and of Physics and Astronomy have nominated Dr. Dubois for the honorary degree. The Faculty Senate Honorary Degrees Committee unanimously supported the recommendation as did the Faculty Senate Executive Board. The Office of the Provost also supports the recommendation which Interim President Seagrave is pleased to present to the Board of Regents, State of Iowa.


Robert J. Barak

Approved: 
Frank J. Stork